



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,116	07/15/2003	Eric Horvitz	MS127735.2/MSFTP263USA	8638
27195 7590 01/04/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER WOO, ISAAC M	
			ART UNIT	PAPER NUMBER
			2166	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/620,116

Applicant(s)

HORVITZ, ERIC

Examiner

Isaac M. Woo

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-55 is/are pending in the application.
- 4a) Of the above claim(s) 22-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-21 and 40-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's Amendments filed on October 30, 2006 have been considered but are deemed moot in view of new ground of rejections below.
2. Claims 5-21 are amended. Claims 22-39 are withdrawn. Claims 1-4 are canceled. Claims 40-55 are newly added. And claims 5-21 and 40-55 are presented for examination for this office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 5-21 and 40-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Donohue (U.S. Patent No. 6,484,197).

With respect to claim 5, Donahue teaches determining a priority of received item utilizing the probabilistic-based classifier (received email is classified by priority of

Art Unit: 2166

probability, col. 4, lines 52-60, col. 6, lines 7-14); and utilizing the priority to facilitate electronic communication (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claims 6 and 41, Donahue teaches at least one of a Bayesian classifier and a support-vector machine classifier (col. 1, lines 11-67 to col. 2, lines 1-65).

With respect to claims 7, 18, 46 and 52, Donahue teaches classifier is explicitly or implicitly trained (col. 1, lines 11-67 to col. 2, lines 1-65).

With respect to claim 8, Donahue teaches the explicit training is performed during initial phases of constructing the probabilistic-based classifier (col. 1, lines 11-67 to col. 2, lines 1-65).

With respect to claims 9 and 48, Donahue teaches the predefined data set employed for explicitly training the probabilistic-based classifier comprises a training set to discriminate between time-critical and non-time-critical items (col. 2, lines 21-64).

With respect to claims 10 and 49, Donahue teaches explicitly training the probabilistic-based classifier comprises utilizing feature selection (col. 2, lines 21-64).

With respect to claim 11, Donahue teaches the feature selection includes a mutual information analysis (col. 2, lines 21-64).

With respect to claim 12, Donahue teaches feature selection operates on single words (col. 2, lines 21-64).

With respect to claim 13, Donahue teaches the feature selection operates on phrases (col. 2, lines 21-64).

With respect to claim 14, Donahue teaches the feature selection operates on parts of speech (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 15, Donahue teaches the feature selection employs high-level patterns (col. 2, lines 21-64).

With respect to claim 16, Donahue teaches the feature selection utilizes tokens (col. 2, lines 21-64).

With respect to claims 17 and 51, Donahue teaches the feature selection utilizes tagged text to discriminate features of the received item (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 19, Donahue teaches implicitly training the probabilistic-based classifier based on at least one of current or historical information of at least one of user presence or a focus of attention of a user (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claim 20, Donahue teaches implicitly training the probabilistic-based classifier based at least in part on an assuming assumption that time-critical items are reviewed prior to non-time-critical items (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claim 21, Donahue teaches continually updating the probabilistic-based classifier via the implicit training (col. 2, lines 21-64).

With respect to claim 40, Donahue teaches classifying priority of an item utilizing a trained classifier (received email is classified by priority, col. 4, lines 52-60, col. 6, lines 7-14); and utilizing the classified priority of the item to infer a desired computer-based automated action to take to facilitate electronic communication (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claim 42, Donahue teaches trained classifier classifies the priority of the item based on a loss function (col. 2, lines 21-64).

With respect to claim 43, Donahue teaches the loss function is determined based on an expected cost in lost opportunities as a function of an amount of time delayed in reviewing the item after it has been received (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claim 44, Donahue teaches the loss function is determined based on a type of the item (col. 1, lines 11-67 to col. 2, lines 1-65, col. 4, lines 52-60, col. 6, lines 7-14).

With respect to claim 45, Donahue teaches the loss function is at least one of a linear loss function or a non-linear loss function (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 47, Donahue teaches the explicit training is performed during the construction of the trained classifier (col. 2, lines 21-64).

With respect to claim 50, Donahue teaches the feature selection operates on at least one of single words, phrases, or parts of speech (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 53, Donahue teaches at least one of current or historical information of at least one of user presence, activity of a user, or a focus and attention of the user (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 54, Donahue teaches at least in part on an assumption that time-critical items are reviewed prior to non-time-critical items (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

With respect to claim 55, Donahue teaches the trained classifier is continually updated via the implicit training (col. 2, lines 21-64, col. 3, lines 6-67 to col. 4, lines 1-60).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2166

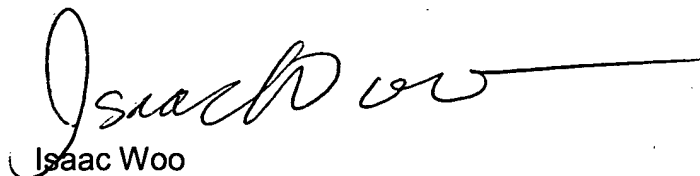
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Isaac Woo', with a long horizontal flourish extending to the right.

Isaac Woo
December 28, 2006